

CLAIMS

What is claimed is:

1. A solar cell module edge face sealing member for, where solar cell module construction is such that one or more solar cell module bodies are captured within one or more frame bodies, sealing one or more gaps between at least one of the solar cell module body or bodies and at least one of the frame body or bodies;
the edge face sealing member being frame-like in shape and formed in more or less parallel fashion with respect to one or more outer shapes of at least one of the solar cell module body or bodies; and
the edge face sealing member capturing at least one of the solar cell module body or bodies along substantially the entire edge portion perimeter thereof, and with these in this state, these being captured within at least one of the frame body or bodies.
2. A solar cell module edge face sealing member according to claim 1 wherein:
the edge face sealing member is roughly c-shaped in cross-section and/or roughly u-shaped in cross-section;
the edge face sealing member comprises one or more upper sealing regions abutting one or more front surfaces of at least one of the solar cell module body or bodies;
the edge face sealing member further comprises one or more lower sealing regions abutting one or more back surfaces of at least one of the solar cell module body or bodies; and
the edge face sealing member further comprises one or more side sealing regions abutting one or more edge faces of at least one of the solar cell module body or bodies.
3. A solar cell module edge face sealing member according to claim 2 wherein at least one of the lower sealing region or regions is longer than at least one of the upper sealing region or regions.
4. A solar cell module edge face sealing member according to claim 2 or 3 wherein:
at least one surface of at least one of the upper sealing region or regions and at least one surface of at least one of the lower sealing region or regions face each other; and
one or more projections are formed on each of at least two respectively facing surfaces among the upper and lower sealing region surfaces which face each other.

- 1 5. A solar cell module edge face sealing member according to claim 4 wherein at least
2 one of the projection or projections comprises one or more single-rib or multiple-rib
3 regions formed in more or less parallel fashion with respect to one or more perimeter
4 edge portions of at least one of the solar cell module body or bodies.
- 1 6. A solar cell module edge face sealing member according to claim 4 wherein one or
2 more tip portions of at least one of the lower sealing region or regions and at least one of
3 the upper sealing region or regions are disposed in inclined fashion at respectively facing
4 sealing region surfaces.
- 1 7. A solar cell module edge face sealing member according to claim 1 wherein at least
2 one of the solar cell module body or bodies is of integrally laminated superstrate
3 construction such that laminated in order over one or more light-receiving glass surfaces
4 constituting one or more front surfaces there are:
5 one or more light-receiving-surface sealing resin layers comprising ethylene vinyl
6 acetate;
7 one or more solar cells;
8 one or more back-surface sealing resin layers comprising ethylene vinyl acetate; and
9 one or more weather-resistant back-surface sealing films.
- 1 8. A solar cell module edge face sealing member according to claim 7 wherein at least
2 one material making up the edge face sealing member is elastomer resin.
- 1 9. A solar cell module edge face sealing member according to claim 8 wherein the
2 elastomer resin comprises one or more polypropylenic and/or polystyrenic resins.
- 1 10. A solar cell module edge face sealing member according to claim 9 wherein:
2 at least one of the polypropylenic elastomer resin or resins is PP-EPDM copolymer;
3 and
4 at least one of the polystyrenic elastomer resin or resins is polystyrene - isoprene
5 copolymer.
- 1 11. A solar cell module edge face sealing member according to claim 9 or 10 wherein the
2 elastomer resin comprises one or more additives of porous structure preventing
3 yellowing of at least one of the sealing resin layer or layers.
- 1 12. A solar cell module edge face sealing member according to claim 11 wherein at least
2 one of the additive or additives is magnesium silicate.

- 1 13. A solar cell module edge face sealing member according to claim 12 wherein at least
2 one of the additive or additives further comprises one or more ultraviolet-resistant agents.
- 1 14. A solar cell module constructed such that one or more solar cell module bodies are
2 captured within one or more frame bodies, wherein:
3 one or more edge face sealing members, frame-like in shape, are formed in more or
4 less parallel fashion with respect to one or more outer shapes of at least one of the solar
5 cell module body or bodies;
6 at least one of the edge face sealing member or members capturing at least one of the
7 solar cell module body or bodies along substantially the entire edge portion perimeter
8 thereof, and with these in this state, these being captured within at least one of the frame
9 body or bodies.
- 1 15. A solar cell module according to claim 14 wherein at least one of the solar cell
2 module body or bodies is of integrally laminated superstrate construction such that
3 laminated in order over one or more light-receiving glass surfaces constituting one or
4 more front surfaces there are:
5 one or more light-receiving-surface sealing resin layers comprising ethylene vinyl
6 acetate;
7 one or more solar cells;
8 one or more back-surface sealing resin layers comprising ethylene vinyl acetate; and
9 one or more weather-resistant back-surface sealing films.